

Operational Risk Assessments

Mount Street US (Georgia) LLP

December 2018

Operational Classifications:	Commercial Mortgage Primary Servicer and Special Servicer
Rankings:	Primary Servicer: MOR CS3 Special Servicer: MOR CS3
Forecast:	Stable – Both Rankings
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Rationale

Morningstar Credit Ratings, LLC assigned its MOR CS3 commercial mortgage primary-servicer and special-servicer rankings to Mount Street US (Georgia) LLP, an indirect operating subsidiary of United Kingdom-based Mount Street International Holdings LLP (together with its affiliated companies, Mount Street). Morningstar assigned the rankings based on these composite factors:

Primary Servicing

- **Organizational Structure and Depth:** MSUS launched in October 2017 and began servicing in April 2018. However, the company has recruited experienced managers and professional staff. Additionally, the two founding partners of Mount Street, who spearheaded MSUS' launch in late 2017, have extensive experience building large-scale servicing platforms in Europe through Mount Street Mortgage Servicing Ltd. and other companies. MSUS' team-oriented, relationship-driven structure addresses essential functions and the company's focus on highly structured loans demanding attentive portfolio management and client reporting. MSUS does not service for any commercial mortgage-backed securitizations, but personnel have the backgrounds for such work. The company emphasizes cross-training and subject-matter experts and has established a formal training function. MSUS has enough capacity for its current work and plans to add more staff as needed to stay ahead of portfolio growth.
- **Technology:** MSUS' technology resources are a core strength. The company uses purchased commercial-mortgage servicing and asset-management systems in tandem with an effective intranet-based workflow and project-management tool. MSUS also leverages the proprietary systems of its parent company to deliver a robust client portal for information exchanges and external reporting. MSUS expects to roll out more technology improvements, especially to ensure cash-management and treasury-administration efficiency, as loan volume increases. A global technology team and vendor effectively address user support, data redundancy and security, and disaster-recovery readiness.
- **Internal Audit and Compliance:** MSUS continues to enhance its documented procedures and will have an effective internal-audit program that will consist of annual Service Organization Control 1 Type II examinations plus quarterly independent operational audits. MSUS underwent a SOC 1 readiness review, which produced no findings. It expects the first SOC 1 report to be issued in early 2019.

During 2019, MSUS also expects to finalize the scope, methodology, and personnel for the quarterly audits. MSUS' workflows and technology applications also have some embedded compliance-monitoring elements. Should MSUS become a servicer or special servicer for publicly rated securitizations, it will add Regulation AB attestations to its audit program.

- Loan-Administration and Portfolio-Management: The company has proactive and controlled practices for asset surveillance, transactions management, payment/remittance processing, taxes and insurance, and other essential loan-administration duties geared for large, highly structured loans. As the portfolio grows and becomes more geographically diverse, MSUS indicated it may consider a real estate tax service to support that function. As a sound control practice, MSUS' delegations of authority require committee approval for most credit decisions, including consent requests and distressed-debt resolutions.

Special Servicing

- Asset-Manager Experience and Professional Depth: MSUS is not yet a named special servicer for CMBS or other third-party clients and has not had the opportunity to manage any active assets. However, the company has experienced personnel for such work. The head of MSUS and the director of the asset-management department both have held senior positions at other special servicers. In addition, MSUS' strategic-projects manager handled a large portfolio, including construction loans, as a senior asset manager at another special servicer. In addition, affiliate Mount Street Portfolio Advisers LLC has three New York-based senior managers to support special servicing. MSPA is completing its original mandate to liquidate the large U.S. portfolio of the former WestLB bank.
- Technology: MSUS' applications for primary-serviced loans have the combined functionality for centralized data management, detailed asset- and portfolio-level tracking, and effective workflow management for CMBS and other specially serviced assets.
- Asset Analytics and Resolution Practices: Based on its practices for performing loans and its evolving special-servicing procedures, we expect MSUS to manage and resolve distressed assets in a proactive, controlled manner based on sound analytics.
- Internal Audit and Compliance Controls: The company expects its internal-audit and compliance practices to cover special-servicing work. Additionally, MSUS plans to expand its vendor oversight function with approved lists, standardized agreements, and centralized status tracking as it adds special-servicing assignments.
- Conflicts-of-Interest Management and Disclosures: MSUS serves strictly as a third-party servicer. It intends to serve in a similar capacity as a special servicer on CMBS transactions and operate without any ownership affiliations with controlling-class or other bondholders.

As of Sept. 30, 2018, MSUS' servicing portfolio consisted of 104 loan positions (183 underlying properties) with an aggregate unpaid principal balance of approximately \$5.05 billion, up from 27 loan positions (42 underlying properties) with an aggregate UPB of \$1.46 billion as of June 30, 2018. While principally servicing for three balance-sheet clients, MSUS' portfolio included 28 syndicated loans involving nine other lenders. As of Sept. 30, the servicing portfolio contained one loan payment 30 days past due. The company projects its year-end servicing volume to be approximately \$9.5 billion and 250 loan positions.

Forecast

The forecast for both rankings is Stable. Based on its personnel, technology, stated practices, auditing plan, and parental resources, MSUS has quickly established the qualifications to serve as an effective primary and special servicer for third-party investors. Our primary-servicing ranking and forecast also consider that MSUS, as a nascent operation, has not had the opportunity to perform the full range of asset-administration duties. We believe MSUS will continue gaining momentum as an adept servicer and asset manager catering to large-scale, highly structured real estate loans.

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Company Profile and Business Overview

MSUS is an indirect subsidiary of Mount Street International Holdings LLP, a privately held firm founded in 2013 and domiciled in the United Kingdom. Mount Street, with its affiliated companies, has approximately 140 employees in eight offices: London (headquarters), Dublin, Athens, Düsseldorf, Frankfurt, Madrid, New York, and Atlanta. Mount Street opened the Atlanta office in October 2017 to serve as the hub for the MSUS operation to service loans in the United States. MSUS began servicing loans in April 2018.

Through its operating subsidiaries, Mount Street's core businesses are credit advisory and underwriting, asset and portfolio management, distressed debt resolutions (especially for "bad bank" portfolios), and loan servicing for third-party investor/lender clients participating in structured finance and other credit transactions. Global assignments and assets under management include not only commercial real estate positions (permanent and construction loans) and mortgage-backed securities transactions, but also corporate loans, project finance/infrastructure financings, and asset-backed transactions involving sectors such as shipping, aviation, and energy. While most transactions have been U.K.-centric, the company has managed sizable deals in Ireland, Italy, The Netherlands, Germany, France, Greece, and Spain. Mount Street also has advised clients and handled assets in the Middle East, Asia, and the U.S. As of October 2018, the company's global managed portfolio totaled approximately \$70 billion involving more than 2,000 deals or loan relationships.

The company services European and other non-U.S. loan portfolios primarily through its 70-person Mount Street Mortgage Servicing Ltd. MSMS has become Europe's largest-volume third-party commercial real estate loan servicer with a near EUR 40 billion servicing portfolio across 20 countries. MSMS is an authorized credit servicing firm in Ireland and holds a debt collections license in Germany. The servicer also was recognized as European Servicer of the Year in 2016 and Servicer of the Year in 2017 by trade publication Real Estate Capital. Propelling Mount Street's rapid growth were its acquisitions of Crown Credit Services GmbH in 2013 and Morgan Stanley Mortgage Servicing Ltd in 2014. In 2016, Mount Street launched a strategic partnership and associated management buyout with Aareal Bank, AG, which, along with other portfolio acquisitions, has further increased Mount Street's servicing book. In early 2017, Aareal Bank also acquired a 20% ownership stake in Mount Street.

In October 2017, Mount Street, through MSMS, acquired EAA Portfolio Advisers GmbH and rebranded it as Mount Street Portfolio Advisers GmbH. MSPA is licensed for investment advisory, portfolio management, investment brokerage, and other brokerage services across Europe and includes a U.S. affiliate, which became an SEC-registered investment adviser on Dec. 11, 2018. MSPA's principal business has been completing EAA's original mandate: to liquidate the remaining distressed-debt portfolio of the former German state-controlled bank, WestLB, AG. In a year, MSPA reduced the pool balance to EUR 22 billion from EUR 29 billion, which was down from the original EUR 150 billion when EAA began the assignment in late 2009. The WestLB portfolio represents a diverse mix of asset types and financing structures, with a concentration of complex asset-backed collateral and transactions in addition to some involving commercial real estate projects. The portfolio also includes a substantial volume of U.S.-based assets managed by an MSPA New York office. Mount Street plans to leverage MSPA's expertise in Europe and the U.S. for potential third-party assignments involving ABS and CMBS/CLO due diligence, portfolio acquisitions, asset surveillance, and distressed-debt resolutions, including support for MSUS' projected work as a named special servicer.

MSUS' first client was the U.S. subsidiary of Aareal Bank, Aareal Capital Corp., which continues to transfer its seasoned and newly originated balance-sheet loans to MSUS. While ACC is its principal client, MSUS has since added two other lender clients. As of October 2018, MSUS serviced a \$6.5 billion portfolio comprising 156 loans. The portfolio includes mostly large-scale, highly structured loans and many syndicated positions in which MSUS serves as lead servicer. By year-end, MSUS projects its servicing portfolio will grow to approximately \$9.5 billion and 250 loans.

Table 1 – Historical Primary- and Special-Servicing Volume

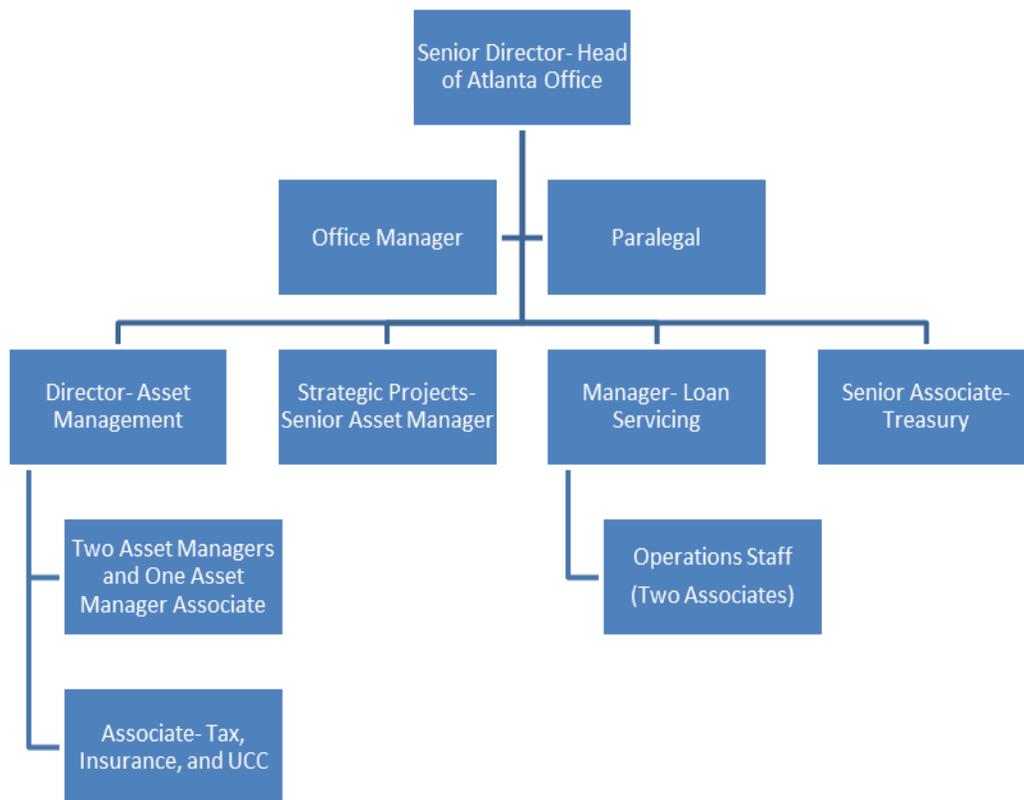
	Sept. 30, 2018		June 30, 2018		Dec. 31, 2017	
	UPB (\$ mil)	*Loans/Properties	UPB (\$ mil)	*Loans/Properties	UPB (\$ mil)	*Loans/Properties
Total Primary Servicing	5,054.1	104/183	1,455.8	27/42	0	0
Total Active Special Servicing**	0	0	0	0	0	0
As a Named Special Servicer**	0	0	0	0	0	0

*Loan counts reflect multiple note positions associated with a single project loan or relationship. **Excludes affiliate Mount Street Portfolio Advisers’ sizable U.S.-based asset-resolution work associated with its ongoing mandate to liquidate the holdings of the former WestLB bank.

Operational Infrastructure

Organizational Structure

Chart 1- Organizational Structure- Mount Street US (November 2018)



As of Sept. 30, 2018, MSUS consisted of 12 people in two principal operating units: loan servicing and asset management. As reflected in the organizational chart above, MSUS added a loan-servicing associate in November for transaction processing and who will be cross trained to support other areas such as taxes and insurance.

The three-person loan-servicing team administers all loan-level transaction processing and accounting, including investor-remittance and escrow-account disbursement requests in conjunction with the treasury manager. The five-person asset-management team covers loan surveillance (financial performance and modeling, inspection reviews, and watchlist management), borrower consents, reserve account/construction draw reviews, and monthly investor reporting, which is handled mostly through the interactive and self-servicing client portal. This team also handles real estate tax and insurance administration, including annual escrow account analyses, UCC tracking and renewals, and payment waterfall administration for cash-managed loans in conjunction with the loan-servicing team and the treasury manager.

The servicer has one asset manager stationed in ACC's New York office to assist with its loans transferring to MSUS from the previous servicer and with some newly originated loans.

Because MSUS' managed portfolio contains no defaulted loans and the company foresees few active assets in its projected special-servicing assignments for 2019, the company does not have dedicated staff for special servicing. However, MSUS believes it can address any immediate needs through several senior staff members, including the Atlanta office head, who have the requisite backgrounds and skills to assume such work. Either before or in tandem with hiring staff, the company plans to leverage MSPA's New York-based asset-management team to support special servicing as the MSPA legacy WestLB portfolio winds down and affords more excess capacity to handle new assets.

The organizational structure reflects a portfolio/client-centric team approach with some elements of functional specialization such as for tax, insurance, and UCC tracking; payment processing; accounting; and cash management. An assigned relationship manager (generally an asset manager) serves as the borrower's main point of contact and collaborates with others across the operation to address issues and requests.

MSUS includes a strategic-projects director who helped launch the U.S. operation and developed construction-loan management procedures for some of the acquired loans. The organization has a temporary paralegal to assist with document reviews and compliance issues as well. MSUS contracts with a national vendor for payroll, benefits, related human resources needs, and certain elements of the MSUS training function. The vendor provides a dedicated human resources manager to MSUS as well.

The company's London-based information-technology staff provides application programming, training, and technical support in collaboration with an international data-services vendor that serves all Mount Street offices.

Management and Staff Experience

As shown in Table 2 below, the management team averages more than 15 years of industry experience, with several employees having more than 10 years of experience. While MSUS has experienced personnel for loan operations and treasury/accounting, the credit culture for the organization is especially oriented around large-loan portfolio management, with most of the senior-level team having special-servicing backgrounds.

Table 2 – Management and Staff: Average Years of Experience (Sept. 30, 2018)

	Industry	Tenure at MSUS or Affiliate
Primary Servicing		
Senior Management*	23	3
Middle Management	14	<1
Staff	6	<1
Portfolio Management Staff Only**	12	<1
Special Servicing Resources***		
MSUS- Asset Managers	12	1
MSPA- New York Office Team	22	3

*Includes the MSUS senior director who manages the Atlanta office head and Mount Street’s managing partner who oversees global servicing.

Positions principally involving asset-performance monitoring and managing credit-related requests. *MSUS- The senior director of MSUS’ Atlanta office, the asset-management department head, and a special-project manager. MSPA- The three senior managers of Mount Street Portfolio Advisors, LLC. Their average tenure includes their time at MSPA’s acquired predecessor entity.

Workload Ratios

Based on its current staffing complement and projection for the servicing portfolio to reach approximately 250 loan positions by year-end, the company will have an approximate 19:1 loans-to-total employee ratio. However, on a borrower-relationship basis, the ratio may be lower.

For special servicing, as noted, MSUS has available asset managers, including direct involvement from its management team and supplemented as needed by MSPA resources, to accommodate a projected low-to-modest volume of active assets during the next 12-18 months based on any prospective special-servicing assignments or from the existing servicing portfolio. MSUS could serve as the special servicer for its current servicing clients, although that has not been formally determined.

Management and Staff Turnover

Since its start, MSUS has not had any management or staff turnover except for one contract staff member who left in October 2018 and was replaced with a direct-employee hire. The company expects to incur minimal voluntary turnover, if any, in the coming months as it focuses on portfolio building and corresponding organizational growth.

Table 3 – Management and Staff Turnover Rates*

	July – September 2018		January – June 2018	
	Primary Servicing	Special Servicing**	Primary Servicing	Special Servicing**
Total Employees - Beginning of Period	10	0	6	0
Total Turnover Rate (%)	0	0	0	0
Hires - Managers	0	0	2	0
Hires- Staff	0	0	2	0
Total Staff***	10	0	10	0

*Staff departures divided by number of staff at beginning of period. **Will designate asset managers from primary servicing, leverage MSPA personnel, and/or add staff as needed. Currently, MSUS has no nonperforming assets. ***MSUS had 12 people as of Oct. 31 and 13 people as of Nov. 15.

Assessment: MSUS has experienced personnel, especially in the areas of asset management, and a scalable organizational structure centered on cross training and relationship management to address the company’s business niche as a boutique servicer catering to highly structured and syndicated loans and clients demanding attentive portfolio management and detailed reporting. Morningstar concurs with MSUS that the company is adequately staffed to support its current client base. The company also demonstrates an ability to recruit additional personnel to stay ahead of growth. The support from its parent for resources, and especially for technology initiatives, further bolsters the operation. As MSUS grows, it may need to refine the organization with more functional specialization for certain loan-administration functions to ensure efficiency and controls.

Training

Commensurate with its size and as a start-up operation, MSUS does not have a designated training coordinator. However, the management team has established and oversees a training function for all employees, including a formalized and required 90-day mentoring-oriented program to acclimate new employees with all functional areas and processes. Integral to training is the human resources vendor web portal, which MSUS leverages to track employee training activities and completed hours. Through the vendor portal, employees have access to a library of online soft skills training courses. Through a separate learning portal, employees are required to complete a data-protection and training tutorials to ensure compliance with the European Union’s General Data Protection Regulation. MSUS managers also are participating in an onsite series of “leadership challenge” workshops offered through the human resources vendor. The corporate parent offers other online training sessions as well.

MSUS targets 40 hours of training per year for each employee. During the first half of 2018, MSUS’ first six months of operations, employees averaged approximately 39 training hours of which a significant portion related to the servicing system and other technology. MSUS grants one training-credit hour for every day of conference attendance. Over time, MSUS expects to enhance its training function with expanded course offerings and scheduled sessions covering pertinent servicing and special-servicing topics.

Assessment: While in business only for one year, MSUS' training function already has a sound foundation. MSUS' ability to leverage its human resources vendor learning portal for tracking and online courses is an effective operational resource and one not consistently found at other servicers. Although skewed by essential technology-training time for new hires, the company's targeted and actual training hours per employee are at the high end of the range compared with some other servicers and special servicers. Based on management's indicated commitment to curriculum expansion and investing resources in this area, Morningstar expects MSUS' training function to strengthen as the company grows.

Technology, Disaster Recovery, and Cybersecurity

Mount Street's London-based information-technology team supports application programming and hardware needs across all business lines including the MSUS operation. The IT staff oversees a SOC/ISO-compliant technology services vendor, which provides a cloud-based network infrastructure, data backup and data-center management, disaster-recovery testing, and 24/7 user support for all Mount Street offices. The vendor also helps MSUS manage its cloud-based telephone system and virtual private network.

MSUS uses the latest version of McCracken Financial Solutions' Strategy servicing system via a remote-hosted application service provider. Strategy, which is widely used by commercial mortgage and CMBS servicers, serves as the system of record and provides loan-level transaction processing and accounting for the entire serviced portfolio. MSUS also is a licensed user of the cloud-based RealINSIGHT asset-management application, which is used by some CMBS special servicers. MSUS uses this application specifically for asset-level surveillance and internal reporting for the ACC loan portfolio. MSUS is working with RealINSIGHT to connect the application with the servicing system.

Additionally, MSUS uses an intranet-based workflow and diary-management application, which has reporting and audit-trail capabilities, to manage loan-level tasks, borrower requests, new-loan pipeline and boarding activity, and general internal communications and document sharing. The workflow tool includes a voucher-template module for servicing staff to initiate online requests for the treasury manager to approve and process remittances and set up new custodial bank accounts for investors and cash-managed loans. MSUS expects to eventually install integrated cash-management and banking software to streamline funds-transfer and treasury-related tasks.

Aside from its purchased and intranet-based applications, MSUS leverages a parent company proprietary application that receives servicing-system data through a bridging database to deliver investor reporting and manage information exchanges through a client web portal. MSMS and MSPA use this application to service and manage non-U.S. portfolios across different asset classes including European CMBS and other securitized transactions. MSUS plans to customize the application and add functionality for U.S.-based assets and CMBS reporting so that it could ultimately become the central tool for surveillance, portfolio management, and client reporting for both performing and specially serviced assets.

MSUS noted that the current features of the proprietary asset-management system include:

- Investor reporting for MSUS' current lender clients;
- The self-service portal for lenders and borrowers with information respectively related to billings, rate-change and other notices, loan-level receipt and disbursement histories, loan documents, insurance coverages, and reserve account and other escrow balances. Through the portal, borrowers can submit financial statements and documents to fulfill loan-draw and other credit-related requests.
- Asset- and data-level access rights enabling information exchanges with other external parties such as closing attorneys;
- The ability to translate content into seven languages, convert currencies, and modify data formats for non-U.S. investors;

- Relational database filtering to view and export data at the loan-level, debt/note-level, and property-level with customizable formats for reporting and analysis, including graphics capabilities;
- Diary/tickler-management to issue alerts regarding performance threshold points such as loan covenants and trigger events; and,
- Workflow management with electronic credit decision and approval tracking for linear and committee-type delegations.

MSUS has a documented disaster recovery/business continuity plan, which includes employee-calling procedures for event declarations and to cascade emergency information. Through its parent and vendor, MSUS replicates data from its primary data center in Connecticut to servers at a Chicago data center on a real-time mirrored basis. The company also has dedicated desktop computers at the backup site to ensure all employees with appropriate access rights can use their VPN connections to continue working on the servicing system, which is not directly web accessible. MSUS conducts formal disaster-recovery testing annually, with other testing exercises performed quarterly. MSUS successfully completed its first formal test in September 2018. The company stated that its disaster-recovery capabilities should enable restoration of applications and core servicing processes within one hour, or more likely, within a few minutes. WFCMS stated that all employees have laptops, enabling them to execute remotely all tasks that they perform in the office. Security protocols include a network-based intrusion detection system and two-factor authentication for VPN access.

Assessment: MSUS technology contains automation and other data-management elements not necessarily found at some long-established mortgage servicers. The company's technology capabilities and resources address the complex loan structures of the current portfolio and prospective new business for 2019, including any special-servicing work. MSUS demonstrates a strong technical acumen and a solid foundation to implement its planned enhancements to accommodate a larger portfolio of increasing diversity and complexity. Based on its data backup protocols, testing regimen, and vendor support, MSUS demonstrates sound disaster-recovery preparedness. However, some servicers back up their data to a tertiary facility to reduce risk further.

Audit, Compliance, and Procedural Completeness

Employees have access to MSUS' documented policies and procedures through the company's intranet site. While the procedures center on core primary-servicing functions, they include loan default management and elements of special servicing. MSUS' office head, in conjunction with other managers, controls policy and procedural changes.

MSUS' audit plan will encompass annual Service Organization Control 1 Type II assessments supplemented with independent, quarterly internal audits. MSUS expects the SOC 1 examination process to commence before year-end with the report issued in first-quarter 2019. Earlier this year to prepare for the first SOC 1, MSUS commissioned the selected audit firm to conduct a readiness review, which had no findings. To ensure initial and ongoing SOC 1 compliance, MSUS' intranet page contains the established control points, including the associated objectives, measurements, and examples of proper evidence to reduce the risk of exceptions.

In consultation with Mount Street's corporate compliance officer, MSUS is working on the scope, procedures, staffing, and reporting plan for its companion internal-audit program, which it expects to launch during 2019. MSUS' interactive workflow/diary management application on its intranet, which includes audit trail functionality, also provides a first-line defensive tool in support of business controls.

Assessment: MSUS has a sound plan for its internal-audit function. The company's election to undergo a readiness review before its first SOC 1 examination and establish a supplemental quarterly audit regimen underscores its commitment to building a servicing platform with effective business controls. To the extent MSUS may become engaged as a servicer and/or special servicer for a publicly rated CMBS, it will likely need to add annual Regulation AB attestations.

While the documented procedures are weighted toward primary servicing, they also generally address most aspects of special servicing. Morningstar expects MSUS to continue enhancing its policies and procedures with more specific instructional references and samples of forms, reports, and application screens as the company builds its client base and completes more of its asset-management application programming initiatives. MSUS also recognizes the benefits of eventually adding a dedicated compliance manager to help ensure policies, procedures, and embedded technology-based workflows adhere to servicing agreements and regulatory requirements, especially for securitized transactions.

Legal Liability and Corporate Insurance

MSUS has insurance coverage for directors and officers, civil liability (error and omissions), crime, and property loss through combined policies with a highly rated U.K.-based insurer for Mount Street globally. Unlike most servicers, MSUS does not have a separate mortgage impairment policy. MSUS also has not yet procured data-protection liability insurance, which is becoming more common among servicers. The company reported that it was not involved in any material pending litigation related to its servicing operations. Additionally, MSUS reported that it has not received any servicing-agreement default notices or citations related to performance deficiencies.

Assessment: Because MSUS shares its insurance policies and their coverage limits with Mount Street’s European servicing platforms, MSUS may be underinsured. Accordingly, it plans to review the policies for adequacy, especially as the U.S. servicing portfolio grows. MSUS noted that it will also consider the merits of a mortgage impairment policy as its servicing work grows.

Primary-Servicing Portfolio Administration

As of Sept. 30, 2018, the servicing portfolio contained 104 loan positions with a total UPB of \$5.05 billion. Through 56 separate credit transactions, the portfolio contained balance sheet loans for three international bank clients. MSUS serviced loans with collateral in 28 states and served as a noncashiering asset manager for a large-scale mixed-use development loan in Costa Rica. The portfolio had asset concentrations in Louisiana, Alabama, New York, and California.

Table 4 – Total Servicing Volume by Property Type (Sept. 30, 2018)

Property Type	UPB (\$ 000s)	Loan Positions	% (UPB)	% (Loans)	Average Size (\$ 000s)
Lodging	1,493,045	24	29.5	23.1	62,210
Mixed Use	461,263	11	9.1	10.6	41,933
Multifamily	183,922	4	3.6	3.8	45,981
Office	2,103,403	50	41.6	48.1	42,068
Retail	785,969	13	15.6	12.5	60,459
Other	26,503	2	0.5	1.9	13,252
Total	5,054,105	104	100.0*	100.0	48,597

*Does not total to 100% because of rounding.

Loan Boarding, Hedge Agreements, Letters of Credit, and Uniform Commercial Code Renewals

MSUS manages the loan-boarding process through a team approach across functional areas using its proprietary interactive workflow tool. Since April 2018, MSUS' first month of servicing, it has boarded 104 loans with a total UPB of approximately \$5.05 billion, which represents the total volume serviced as of Sept. 30, 2018. MSUS has received most loans in stages as bulk transfers from another servicer. However, it has boarded some newly originated and modified loans.

MSUS targets three days to board new loans with data necessary to conduct payment processing and investor reporting. With most loans received as transfers, the company noted that actual time has been less than a day. During the boarding phase for primary-serviced and, prospectively, for any specially serviced loans, it creates and centrally maintains summaries of deal-specific and loan-level servicing and related PSA requirements. Loan-boarding procedures require staff to compare system inputs with source data and include a secondary level of review. The servicing system also provides data-input exception reporting. MSUS uses technology-mapping tools to facilitate the bulk-loan transfer process, which has involved a different outgoing servicing system. The company expects its quarterly audit program to examine loan-boarding accuracy as well.

Through a semi-automated process, the company issues borrower welcome letters within three days after the effective date of a new servicing assignment or one day after boarding a loan. For newly originated loans, welcome letters include borrowers' compliance requirements. As noted in our summary of MSUS' technology, the company inputs borrower compliance items and covenant triggers during the boarding phase for ongoing tracking.

Within its current scope of duties, MSUS does not monitor any letters of credit as supporting collateral. However, MSUS noted that it has the compliance-tracking capabilities (and vault storage for LOCs) to do so. The company does monitor interest-rate cap agreements. It abstracts the key terms of the hedging agreements to track borrower compliance and counterparty credit ratings.

The servicer noted that all loans have UCC filings and it tracks upcoming expirations through the servicing system. MSUS does not use a third-party vendor to assist with tracking and filing UCC continuation statements. Thus far, it has not had any filings in need of renewal.

Assessment: Much of MSUS' servicing work has centered on loan boarding and especially systems mapping, external servicer coordination, and abstracting complex loan agreements to establish compliance tracking and servicing rules. The company's team approach to this work, procedures, technology support, and accomplishments thus far indicate that it has managed this function in a thorough, controlled, and expeditious manner. For reinforcement and reminder purposes, MSUS may consider including loan compliance obligations in the welcome letters issued to borrowers on transferred as well as newly originated loans. While MSUS has sound tracking procedures for UCC filings, it may consider the benefits of engaging a vendor specialist to assist with that function as the portfolio grows.

Payment Processing

MSUS receives essentially all payments as wire transfers, with a growing portion of the portfolio involving cash-managed loans. However, MSUS does use dual-control and logging procedures to retrieve and open the daily postal mail in the unlikely event a borrower pays by check, which it deposits the same day, if possible, at a local bank branch. The company segregates check-deposit preparation, system posting (using check copies), and bank activity reconciliations among staff. Because of its negligible check volume, MSUS does not have onsite deposit-scanning capabilities.

As required by its servicing agreements, MSUS receives borrower payments directly into respective client-specific custodial accounts rather than through a central clearing account. It then wires funds to its investor clients from these accounts through established and repetitive remittance protocols controlled through a locked-down, treasury-managed Excel file. For cash-managed loans, MSUS initiates daily cash sweeps of tenant-level payments from local banks, which activity MSUS monitors throughout the day.

Through a mostly manual process, the servicing team posts each payment to the servicing system, which will allocate funds to the loan's respective escrow account records. The asset-management staff provides guidance to revolve any nonmatching payments. With a segregation of tasks among staff, MSUS balances custodial bank account activity daily with system entries and records. MSUS uses an electronic voucher and approval process through its intranet that enables servicing staff to send escrow disbursement or new bank account requests to treasury. However, the voucher system is not connected with the servicing system.

As of Sept. 30, 2018, MSUS reported no unreconciled or unidentified items older than two days in its investor accounts or payments held in suspense that were older than 60 days.

For floating-rate loans, MSUS automatically updates indexes, and corresponding interest rates, daily through a technology-developed process, which extracts index changes from source files to an Excel format that uploads to the servicing system through its mapping tool.

Table 5 – Primary-Servicing Floating-Rate and Cash-Managed Loans

	Sept. 30, 2018		June 30, 2018	
	UPB (\$ 000s)	Loans (#)	UPB (\$ 000s)	Loans (#)
Floating-Rate Loans	3,970,384	84	1,146,303	20
Component of Primary Servicing (%)	78.6	80.8	78.7	74.1
Cash-Managed Loans*	1,619,043	23	463,839	6
Component of Primary Servicing (%)	32.0	22.1	31.9	
Noncashiering Loans**	97,319	4	98,668	4
Component of Primary Servicing (%)	1.9	3.8	6.8	14.8

*Active hard lockbox agreements. **Servicing duties exclude payment receipts/disbursements processing and related accounting.

Assessment: MSUS has a controlled payment-processing function based on its stated practices and procedures, lack of any aged suspense or unidentified items, and clear results from its SOC 1 readiness review. The company acknowledges that an integrated treasury-management application, in tandem with other programming, would likely improve transaction-processing efficiency especially for an increasing volume of cash-managed loans. MSUS noted that it already oversees more than 80 bank accounts. By consolidating its bank-account management and exploring services/products developed to support automated funds transfers and cash management, MSUS may be able to streamline its treasury processes to realize increased operating efficiency. The company's automated process to update floating-rate loan index changes seems effective.

Real Estate Tax and Insurance Administration

As of Sept. 30, 2018, MSUS had 42 loans, or 40% of its primary-serviced portfolio, escrowed for real estate taxes. Its policies call for remitting tax payments within early-pay discount periods. Cumulatively since April 2018, the servicer has disbursed more than \$3.9 million from tax escrow accounts, and it has not incurred any penalties because of late or missed payments. The company uses the servicing system to track tax payment due dates and the payment status for all loans, whether escrowed or not. For nonescrowed loans, MSUS sends notices to borrowers requesting evidence of paid taxes. Rather than using the servicing system, MSUS generates and sends borrower notices manually through other applications. However, the servicer is developing the functionality to automatically generate tax payment, insurance renewal reminders, and other notices and alerts to borrowers through its proprietary asset-management application and associated web portal. Because of its still modest loan volume, MSUS manages tax administration completely in house without support from a tax service.

As of Sept. 30, 2018, MSUS had 24 loans, or 23% of its primary-serviced portfolio, escrowed for insurance premiums. It currently manages insurance administration, including policy reviews and renewal tracking, completely through in-house staff. The company tracks insurance requirements at the loan and property levels through the servicing system, although it may transition some of this work to the asset-management application once that functionality is fully available. MSUS validates insurance requirements, including carriers' credit ratings, annually at the time of policy renewal. Through the servicing system, the company issues its first policy-renewal reminder notice to borrowers at 30 days before expiration and again at seven days before expiration.

The company noted that it has not secured a standby forced-placed insurance policy. However, MSUS stated that it has prearranged to obtain such coverage immediately when needed and with provisions for 90 days of retroactive coverage.

Assessment: MSUS' tax and insurance administration practices are overall proactive and acceptably controlled. Most servicers recognize efficiency benefits from using a tax service to oversee large and geographically diverse portfolios. MSUS acknowledged that it will reassess this need as the portfolio grows. Eventually, as MSUS adds more loans, it may consider the potential efficiency benefits of having separate specialists each for tax administration and insurance administration. MSUS' practice of sending insurance policy reminder notices at 30 days and seven days before policy expiration is sufficiently proactive, although some servicers begin issuing notices at 45, or even 60, days before expiration.

Capital Expenditure Reserve Management

The asset-management team has responsibility for reviewing property-level capital expenditures and requesting the release of funds from reserve accounts tracked through the servicing system. The company also noted that it will re-analyze reserve account adequacy annually. Prior to disbursement, management must approve all reserve-account disbursement requests. MSUS' reserve-account management may also involve budget approvals, interest-reserve analysis, and administering loan-draw requests for tenant space buildouts and larger-scale construction projects. MSUS' standard practices require lien waivers and engineering inspections to verify work progress. MSUS has staff with construction-loan servicing experience and, as noted, it serves as the asset manager for a large development project in Costa Rica.

Assessment: MSUS has sound controls for capital-expenditure funding requests and reserve-account management for large and complex loan structures. Its policy to review reserve-account activity and adequacy annually also is a best practice. Morningstar also recognizes the added value of certain staff having construction-loan servicing experience.

Investor Reporting and Accounting

Through its proprietary web portal, which receives data from the servicing system, MSUS provides its lender clients with access to detailed loan performance reports. Any issued investor reports require manager review and approval.

As of Sept. 30, 2018, MSUS had responsibility for 21 separate investor-level remittances each month, which included nine lenders on 28 syndicated project loans. Each remittance requires review and approval from the servicing and treasury managers. Despite MSUS still being a lean organization, it segregates investor-report preparation, investor remittance, and account-reconciliation tasks. It also requires a secondary level of review and sign off for custodial-account reconciliations, which the treasury manager oversees through a mostly automated process. MSUS reconciles bank account activity daily and with each investor remittance, with more formal reconciliations performed at month-end. As of Sept. 30, 2018, the company reported no unidentified items in custodial accounts older than 60 days. MSUS also tracks custodial banks' credit ratings for servicing-agreement compliance.

Assessment: MSUS has established well-controlled practices for investor accounting and reporting as demonstrated by its clean reporting and remitting record thus far, its solid degree of automation, and its segregation of duties. Based on its demonstrated ability to handle complex loan reporting structures for its current clients, MSUS has the staffing aptitude and technology capabilities to address investor reporting and accounting for CMBS transactions.

Portfolio Management and Surveillance

Financial-Statement Analysis and Property Inspections

Asset managers, as part of their surveillance work, review property-level operating statements and inspection reports. MSUS tracks borrowers' requirements and submissions through its intranet workflow application in tandem with the purchased asset-management system, which also assists with the spreading and analysis process. As MSUS boards transferred loans, it noted that it has been especially focused on reviewing borrowers' financial compliance requirements to ensure enforcement, which may also require quarterly submissions of operating statements. Although MSUS does not yet have any submission-rate data, it expects most borrowers to provide their annual statements by May 31.

Property inspection are not in the current scope of MSUS' required servicing duties. Rather, MSUS' lender clients prefer to order or conduct their own property inspections. However, MSUS receives such inspections as they become available and analyzes them as part of its surveillance activities, which will include tracking and resolving deferred maintenance issues. The company centrally archives received inspection reports and plans to link them to its proprietary asset-management system. As may be required by future servicing agreements, MSUS expects to conduct property inspections through vetted and approved external vendors.

Watchlist, Trigger Events, and Early-Stage Collections

As noted, MSUS centrally tracks all trigger-event and borrower-compliance requirements. Although its portfolio is fully performing, MSUS will establish a loan watchlist report when needed, with criteria based on trigger events, compliance covenant breaches, tenancy and property cash flow concerns, or other credit performance issues. MSUS' watchlist criteria will be inclusive of any investor-established requirements. The company noted that enhancement for its asset-management application in 2019 will include automatic watchlist report feeds based on property financials and inspections.

The servicing system generates a daily report of any delinquent payments. MSUS expects asset managers to contact borrowers by telephone or email one day after applicable grace periods even though documented procedures state a three-day maximum time frame. MSUS plans to issue the first written notice to borrowers five days after a payment due date and again after 10 days. The company will maintain a chronology of collection efforts on its workflow or asset-management systems. For maturing loans, MSUS' procedures note that borrowers will receive notices at 60 and then 30 days in advance.

Assessment: MSUS has established sound portfolio-management procedures to address large and complex credits. Assisted through its technology, the company's loan-boarding triage and surveillance work thus far indicates a proactive, thorough approach to financial-statement analysis, trigger-event monitoring, and potential watchlist inclusion. For any CMBS work, MSUS plans to integrate CREFC criteria and reporting guidelines for property operating statement analysis and watchlists. MSUS' payment collection practices are sound, although we have observed that most servicers' procedures call for issuing the first payment-reminder notice sooner following a missed payment. Most servicers also initiate borrower contact sooner than 60 days before scheduled loan maturity dates.

Borrower-Consent Requests (Primary and Special Servicing)

The asset-management team will handle borrower-consent requests (such as assumptions, property releases, and SNDA/lease reviews) related to MSUS' approval role as either a servicer or special servicer. MSUS expects to track work progress through its intranet-based workflow tool and leverage the client/borrower portal for document requests. MSUS' delegations of authority require management-team committee approval for most credit decisions, including consent requests.

Assessment: Although MSUS has not yet had the opportunity to work on borrower consents, its senior-level team has experience analyzing and coordinating such requests. Its technology tools also should facilitate the analytics and processing controls to monitor timeliness. As MSUS completes its technology and procedural enhancements, it may gain efficiency by developing underwriting templates and information checklists for the most common consent types, with deference to CREFC's established guidelines.

Special-Servicing Administration

Asset-Review Process

MSUS will require borrowers to sign standardized prenegotiation letters prior to workout discussions. Asset managers will conduct a full file review and prepare and obtain approval of initial loan resolution plans within 90 days of a transfer. They also will prepare and obtain approval of an REO asset resolution plan within 60 days of title transfer. Asset managers will submit an updated asset plan or status report, which includes a net present value analysis of alternative resolution strategies, to obtain approval for specific terms of negotiated resolutions. Asset managers can prepare their resolution plans directly in the purchased asset-management system. The company's delegations of authority require a formal committee process for the approval of initial asset plans and negotiated resolutions, including plans recommending foreclosure or calculation of a fair market value. For any CMBS work, MSUS plans to monitor master servicers' outstanding advances against property values and expected recovery amounts and consult with master servicers on advancing decisions.

Assessment: MSUS has proactive, controlled asset-recovery practices based on its stated policies and procedures. The company's high intensity level for performing loans and its experienced asset managers indicate that it should have equally effective special-servicing practices. The company's technology provides a sound platform to manage and report on specially serviced assets, including

those in CMBS transactions. We expect MSUS to employ rigorous asset-resolution analytics based on managers' discussion of their work and successes at other special servicers, and MSPA's record liquidating complex assets of the former WestLB Bank.

REO Property Management

MSUS plans to use dual trust accounts to control rental income and disburse operating expenses. Asset managers will review property-level operating statements received from external property management companies and enter this information into the asset-management system for cash flow and budget-variance tracking. Apart from asset managers, accounting/treasury staff will independently reconcile the property-management REO bank accounts. Accounting staff also will establish the bank accounts and grant asset managers view-only access to them. Asset managers, with management and accounting approvals, will monitor and authorize the monthly funding of property managers' operating expenses based on approved budgets. Expenditures for larger or nonbudgeted items will also require management approval.

MSUS plans to develop its own standard engagement and operating agreements that will delineate property managers' responsibilities, compliance requirements, and reporting obligations. MSUS does not have or intend to use any affiliated companies for brokerage or property management. Based on volume, the company also may perform audits of hired property management firms. MSUS does not have its own property and liability insurance coverage, but it intends to procure such a policy in advance of acquiring REO assets.

Assessment: MSUS has sound plans for proactive and controlled REO property-management oversight based on its stated approach and procedures. Although the company has not yet had the opportunity to acquire and managed REO assets, its managers have the requisite knowledge and experience. MSUS' technology tools also should effectively support this function.

Legal and Vendor Oversight

MSUS expects to use a request-for-proposal bidding process to qualify and engage vendors for most services such as appraisals, environmental and engineering assessments, legal, property management, and property brokerage. As MSUS adds special-servicing work, it expects to track vendor performance and build centralized approved-vendor lists. The company also plans to develop its own form agreements for various service providers. MSUS' intranet workflow/diary manager tool tracks pending engagements and the review of submitted work. The company noted that technology enhancements for its proprietary asset-management application will address vendor management.

Although MSUS does not have its own legal unit, Mount Street's London-based legal team supports MSUS in its day-to-day activities. MSUS also has a paralegal who has a law degree and assists with incoming loan file due diligence and other asset-management work. MSUS noted that asset managers, along with their team leader, will review and approve invoices for legal services.

Assessment: MSUS has acceptable control practices to qualify, engage, and track vendors. We also recognize the company's plans to expand its vendor-oversight function through technology and procedural enhancements, especially as it gains special-servicing work.

Investor and Master-Servicer Reporting

For CMBS assignments, MSUS plans to expand its policies and procedures to address special-servicer reporting requirements with respect to property-protection advancing, realized losses, updated appraisals, and communication with master servicers on advancing decisions.

Assessment: Through their work at other special servicers, MSUS' managers are experienced with detailed reporting for CMBS transactions, syndicated loans, and other types of investors. The company's technology platform also has the capabilities to meet these requirements.

Ranking Definitions

The numerical scale of MOR CS1 to MOR CS4 is defined as follows:

- 1 Exceeds prudent loan servicing standards in key areas of risk
- 2 Demonstrates proficiency in key areas of risk
- 3 Demonstrates compliance in key areas of risk
- 4 Demonstrates lack of compliance in one or more key areas of risk

A servicer assigned a ranking of at least MOR CS3 is deemed to comply with what we view as the minimum prudent loan servicing standards and requirements for the servicer's operational category and role. Morningstar's operational risk assessments methodology and all published reports are available at www.morningstarcreditratings.com.

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